

New insights into the effect of pH on the mechanism of ofloxacin electrochemical detection in aqueous solution

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Supplementary Material 1

As shown in Figure S1 (a, b), the interface morphology of Gr/GCE was characterized using SEM. Our results indicated that the surface of the Gr/GCE featured a folded lamella structure, indicating that Gr was able to successfully modify the electrode surface to effectively increase its specific surface area.

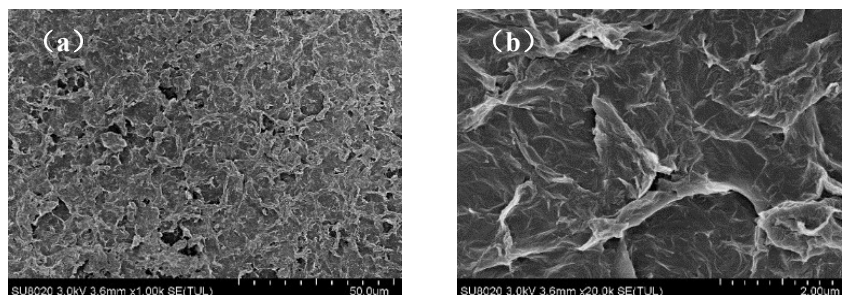


Figure S1. (a, b) Scanning electron microscopy images of a graphene-modified glassy carbon electrode (Gr/GCE).

Supplementary Material 2

The electrochemical sensor is a device that produces sensing signal by the reaction between the electrode surface and the target substance, and then converts the sensing signal into an identifiable electric signal proportional to the concentration of the target substance through the transducer, so as to achieve qualitative or quantitative analysis and detection of the target substance. The schematic diagram of its working principle is shown in the following figure.

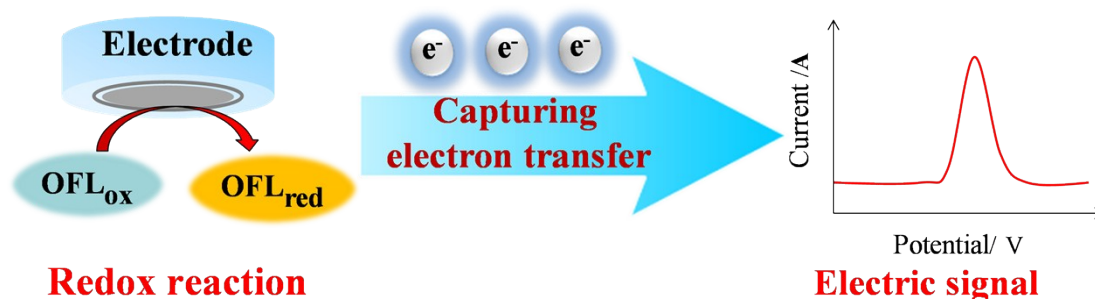


Figure S2 The schematic diagram of electrochemical sensor principle